## **CS160 SP03 Final Exam Prep Tips**

## Preparing for the Exam

There is no substitute for consistent work. But if you find yourself in the unenviable position of having a week to cram for finals, these tips may help you:

- 1. First skim lecture slides to get an idea of the main concepts and keywords. By skim, you should take up to 5 minutes only.
- 2. Next skim corresponding reading to get an idea of its overall layout, and the sections that cover the main concepts and keywords discussed in lecture.
- 3. Read the lecture slides carefully in one pass. When doing so, note the parts that you do not fully understand, and additional questions that you may have.
- 4. Read the corresponding reading, paying more attention to sections that elaborate on material covered in lecture and/or address the above parts that you have questions on.
- 5. Effective reading is usually achieved by applying the 80/20 rule, i.e. spend 80% of your time reading only 20% of the paper. The trick is in figuring out what's the important 20% of the paper that is worth focusing on, and that's why it is crucial to identify the reading's overall structure, parts that you don't fully understand, and questions that you have, etc. in steps 1-3.
- 6. After reading, pause to reflect. It is only through reflection that you truly comprehend *and retain* what you read, and reflection should take as much time as the reading process. Some helpful questions:
  - How would you explain this concept in your own words? (Very important for recall-type questions.)
  - What is the significance of this idea, result, etc.?
    - E.g. "Why is Wizard of Oz important?"
    - E.g. "What are the design implications of the presence effect?"
    - E.g. "If you were the CIO, how would you employ email in your organization for ... taking the findings of Sproull and Kiesler into consideration?"
  - What are the relative pros and cons of some techniques?
  - How do various concepts and ideas relate to one another?
    E.g. "Metaphors are useful for communicating a new idea to a person by leveraging on his prior knowledge, but break down at some point. In what way does the master-apprentice metaphor in contextual inquiry break down?"
- 7. Good exam questions test for understanding at all levels of Bloom's taxonomy. Make sure that you take all these levels into account when reflecting:
  - Recall
  - Comprehension
  - Application (e.g. design questions, design implications, etc.)
  - Analysis (breaking concepts down into sub-parts, seeing patterns, etc.)
  - Synthesis (putting different concepts together)
  - Evaluation (compare and assess value of different approaches)

8. Use the practice finals to help you revise the material. Make sure that you understand what these sample questions are testing you on.

## Taking the Exam

- 1. Time management is the key to acing any exam. In the Spring 2003 CS160 midterm, a 1-point question should take approximately one minute to answer. Don't spend too much time on the relatively unimportant questions.
  - Skim through the questions when you first get the exam script to work out a rough time allocation to adhere to for the rest of the exam.
  - Practice answering questions! You should be able to answer recall-type questions *instantaneously*. Make up these questions while reflecting on the readings.
  - Ditto for application- and design-type questions. Several students did very well on the conceptual part of the Spring 2003 midterm, but ran out of time for the heuristic evaluation and storyboarding sections.
  - If you are stumped on any question, skip it and go on to subsequent ones.
  - Attempt to provide a solution for every question, even if it's not totally correct. When grading, we cannot award partial credit if no solution is given.
- 2. Give unambiguous answers. E.g. When asked for a dependent variable, write "time to complete task" and not just "time." We grade for demonstration of understanding, so we need to see unambiguous answers to be sure that you really grasp the material.
- 3. Since we grade for understanding, unless explicitly stated, we do not require you to give a laundry list of points in your solution. It is more important instead to highlight only 2-3 points, and to elaborate on each of them, highlighting the salient aspects, so that we are convinced that you understand the material.
- 4. Read the instructions on the exam very carefully. A couple of students had several points taken off for not identifying the heuristics violated in the midterm. A related problem cropped up in the individual heuristic evaluation assignment.
- 5. Even though we proof-read the questions several times before the exam, in case of ambiguity in any question, clarify immediately with the teaching staff. We need to be aware of these ambiguities in order to take them into account when grading.

Finally, good luck on the final exam!

This handout was prepared based on conversations with current and past CS160 students about their exam experiences. Comments on additions and improvements are greatly appreciated. Please email them to <a href="mattkam@cs.berkeley.edu">mattkam@cs.berkeley.edu</a>.